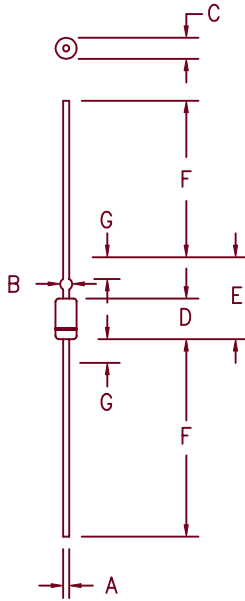


2 Amp Schottky MSL245



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.025	.035	.64	.89	
B	.045	.100	1.14	2.54	3
C	.215	.235	5.46	5.97	1
D	.293	.357	7.44	9.07	
E	---	.570	---	14.48	
F	1.000	1.625	25.40	41.28	
G	---	.188	---	4.78	2

DO-13

Notes:

1. The major diameter is essentially constant along its length
2. Within this zone diameter may vary to allow for lead finishes and irregularities
3. Dimensions to allow for pinch or seal deformation anywhere along tubulation

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
MSL245	45V	45V

- Schottky Barrier Rectifier
- Guard ring protection
- Low forward voltage
- 125°C junction temperature
- Reverse energy tested
- Hermetic package

Electrical Characteristics

Average forward current	I _{F(AV)} 2.0 Amps	T _C = 85°C, square wave, R _{θJC} = 30°C/W, L = 0"
Average forward current	I _{F(AV)} 2.0 Amps	T _L = 50°C, square wave, R _{θJL} = 60°C/W, L = 3/8"
Maximum surge current	I _{FSM} 125 Amps	8.3ms, half sine, T _J = 125°C
Max peak forward voltage	V _{FM} .40 Volts	I _{FM} = 2.0A; T _J = 125°C*
Max peak forward voltage	V _{FM} .45 Volts	I _{FM} = 2.0A; T _J = 25°C*
Max peak reverse current	I _{RM} 50 mA	V _{RRM, T_J} = 125°C*
Max peak reverse current	I _{RM} 1.5 mA	V _{RRM, T_J} = 25°C
Typical junction capacitance	C _J 220 pF	V _R = 5.0V, T _J = 25°C

*Pulse test: Pulse width 300 μsec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range	T _{STG}	-65°C to 150°C
Operating junction temp range	T _J	-65°C to 125°C
Maximum thermal resistance L = 3/8"	R _{θJL}	60°C/W Junction to lead
L = 0"	R _{θJC}	30°C/W Junction to case
Weight		.049 ounces (1.4 grams) typical

MSL245

Figure 1
Typical Forward Characteristics

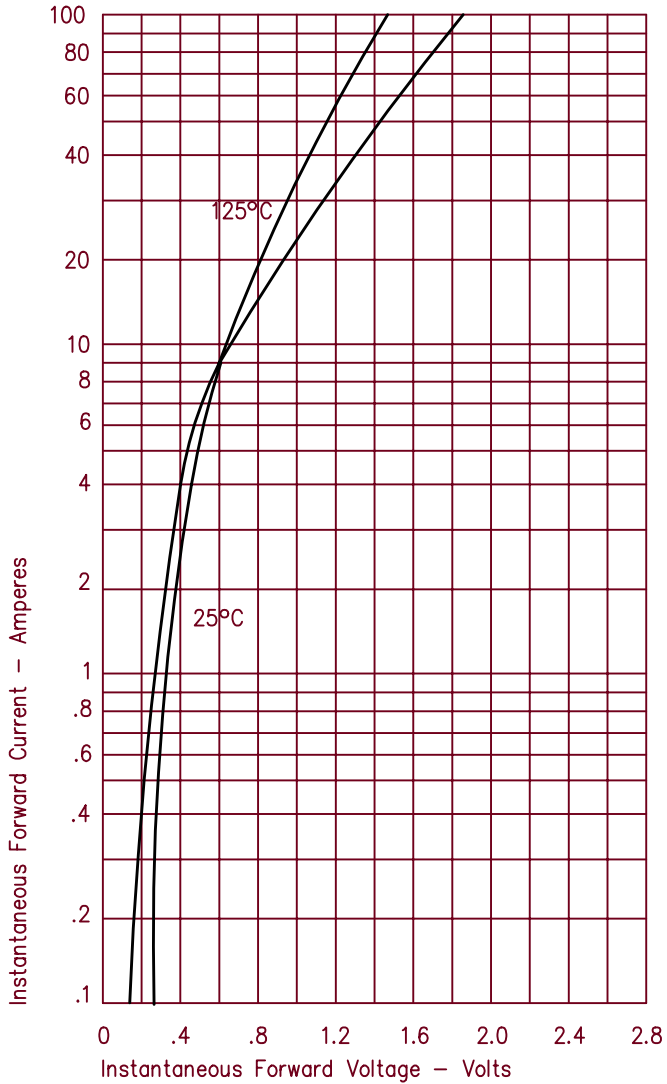


Figure 3
Typical Junction Capacitance

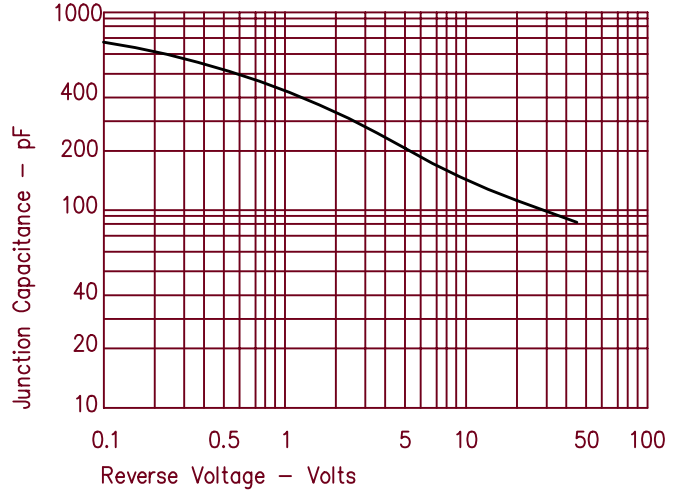


Figure 2
Typical Reverse Characteristics

